

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
30 October 2003 (30.10.2003)

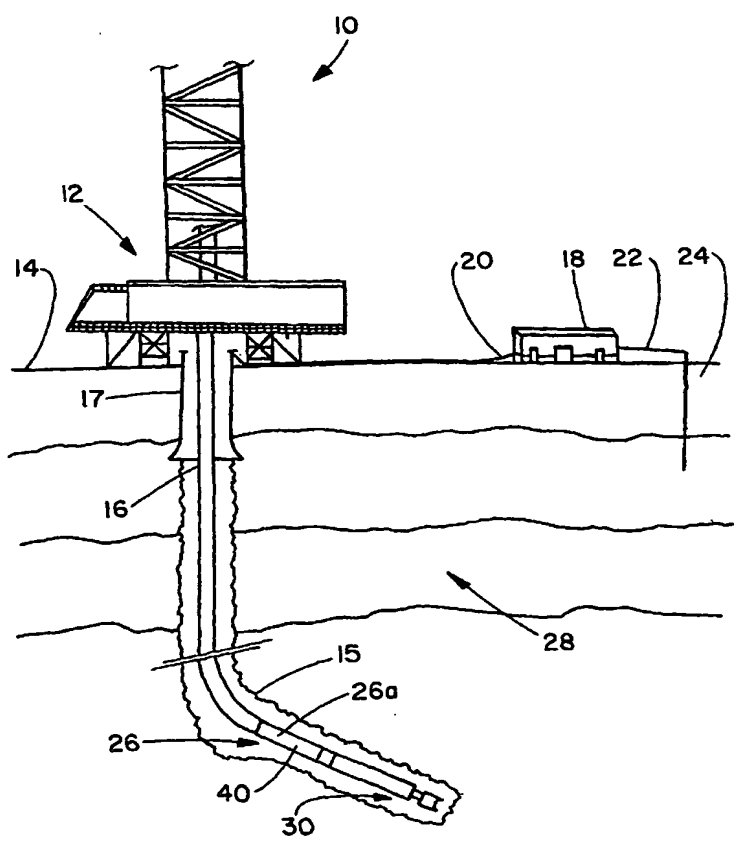
PCT

(10) International Publication Number
WO 03/090311 A2

- (51) International Patent Classification⁷: **H01Q**
- (21) International Application Number: **PCT/US03/11657**
- (22) International Filing Date: **16 April 2003 (16.04.2003)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:
60/372,863 **16 April 2002 (16.04.2002)** **US**
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- (81) Designated States (national): **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.**
- (84) Designated States (regional): **ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).**

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(54) Title: **EXTENDED RANGE EMF ANTENNA**



(57) Abstract: A measuring while drilling system typically has a metal pipework extending underground connected to an antenna. The metal pipework and the antenna are both connected to a type of downhole equipment. The antenna transmits or receives signals to/from a transceiver located on the surface, and the transceiver is connected to the metal pipework and to a ground. The system is improved by joining a plurality of sections of wired drill pipe together to form a section where the antenna is integral with the metal pipework. One end of the section of wired drill pipe is joined to downhole equipment and another end is joined to a conventional metal pipework.



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